

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: Rosen, et al. Docket No.: PZ020P2C1

Application No.: 10/621,401 Group Art Unit: 1631

Filed: July 18, 2003 Examiner: M.K. Zeman

Title: 125 Human Secreted Proteins Confirmation No.: 6102

## INFORMATION DISCLOSURE STATEMENT PURSUANT TO 37 C.F.R. § 1.97(b)

Commissioner for Patents and Trademarks Washington, D.C. 20231

Sir:

Pursuant to 37 C.F.R. § 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to references AA-CF listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the listed references be made of record therein and appear among the "References Cited" on any patent to issue therefrom. A copy of references AA and CD-CF, which may be relevant to the presently claimed invention, are enclosed.

Copies of references AB-CC were submitted by Applicants or cited by the Examiner during prosecution of U. S. Patent Application Serial Nos. 09/974,879, filed October 12, 2001; 09/818,683, filed March 28, 2001; and 09/305,736, filed May 5, 1999, to which the instant application claims priority under 35 U.S.C. § 120. Pursuant to 37 C.F.R. § 1.98(d), the Examiner is directed to the above-listed files for copies of reference(s) AB-CC.

Applicants wish to bring to the attention of the Examiner that SEQ ID NO:17 and the corresponding cDNA clone of this application are related to SEQ ID NO:17197 in copending U.S. Patent Application Serial No. 09/912,292, filed July 26, 2001. A legible copy of that portion of U.S. Patent Application Serial No. 09/912,292, which caused it to be listed on the attached revised form PTO/SB/08 is submitted herewith as reference AA.

Identification of the listed reference is not to be construed as an admission of any individual associated with the filing or prosecution of the subject application that such reference is available as "prior art" against the subject application. Furthermore, Applicants do not waive any rights to appropriate action to establish patentability over the listed document should it be applied as a reference against the claims of the subject application.

It is submitted that the Information Disclosure Statement is in compliance with 37 C.F.R. 1.98 and the Examiner is respectfully requested to consider the listed reference.

This Information Disclosure Statement is filed after the mailing of the first Office Action on the merits, but before the mailing date of a Final Office Action or Notice of Allowance (37 CFR 1.97(c)). Therefore, please charge our Deposit Account No. 08-3425 in the amount of \$180.00 covering the fee set forth in 37 C.F.R. 1.17(p). The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 08-3425.

Dated: September 28, 2004

---

Respectfully submitted,

Doyle A. Siever, #47,088

Patent Agent

**HUMAN GENOME SCIENCES, INC.** 

14200 Shady Grove Road Rockville, MD 20850

Phone: 301-354-3932

PTO/SB/08a/b (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Sı	bstitute for form 1449A/B/PT	0		Complete if Known		
				Application Number	10/621,401-Conf. #6102	
	NFORMATION	I DI	SCLOSURE	Filing Date	July 18, 2003	
5	STATEMENT E	3Y /	APPLICANT	First Named Inventor	Craig A. Rosen	
				Art Unit	1631	
	(Use as many she	eets as	necessary)	Examiner Name	M. K. Zeman	
Sheet	1	of	3	Attorney Docket Number	PZ020P2C1	

	U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.1	Document Number  Number-Kind Code <sup>2</sup> ( <i>if known</i> )	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
	AA	US-09/912,292	NOT PUBLISHED	ROSEN, et al.	pages 1-75 (pages 1 & 2 partially redacted); portion of Table 2; and SEQ ID NO:17197	

	FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Foreign Patent Document  Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear			
	AB	WO-WO97/07198-A2	02-27-1997	Genetics Inst				
	AC	WO-WO90/14432-A1	11-29-1990	Genetics Inst				
	AD	WO-WO96/17925-A1	06-13-1996	Immunex Corp				
	AE	WO-99/24836	05-20-1999	Human Genome Sciences,				
				Inc.				
	AF	WO-00/56889	09-28-2000	Genentech, Inc.				
	AG	WO-00/53758	09-14-2000	Genentech, Inc.				
	AH	WO-00/37639	06-29-2000	Incyte Pharmaceuticals, Inc.				

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \*\* CITE NO.: Those patent(s) or publication(s) which are marked with an double asterisk (\*\*) next to the Cite No. are not supplied because they were previously cited by or submitted to the Office in a prior application relied upon in this application for an earlier filing date under 35 U.S.C. 120. ¹ Applicant's unlock edition designation number (optional). ² See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language Translation is attached.

	NON PATENT LITERATURE DOCUMENTS						
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²				
	Al	HILLER et al., "The WashU-Merck EST Project," GenBank Accession No. W52793, (06/04/1996)					
	AJ	HILLER et al., "The WashU-Merck EST Project," GenBank Accession No. R52090, (05/24/1995)					
	AK	GENEXPRESS, "The Genexpress cDNA program," GenBank Accession No. Z40332, (11/04/1994)					
	AL	HILLER et al., "The WashU-Merck EST Project," GenBank Accession No. R49159, (05/24/1995)					
	AM	KLEIN et al., "Selection for Genes Encoding Secreted Proteins and Receptors," Proceedings of the National Academy of Sciences of USA, National Academy of Science, Washington, US, Genetics, Vol. 93:7108-7113, (1996)					
	AN	JACOBS et al., "A Genetic Selection for Isolating cDNAs Encoding Secreted Proteins," Gene: An International Journal on Genes and Genomes, Elsevier Science Publishers, Barking, GB, Vol. 198:289-296, (10/01/1997)					
	AO	HILLER et al., "The WashU-Merck EST Project 1997," GenBank Accession No. AA446064, (06/03/1997)					

Examiner	Date	
Signature	Considered	

PTO/SB/08a/b (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Sub	estitute for form 1449A/B/PT	0	3	Complete if Known		
				Application Number	10/621,401-Conf. #6102	
I IN	NFORMATION	I DI	SCLOSURE	Filing Date	July 18, 2003	
S	TATEMENT E	3Y /	APPLICANT	First Named Inventor	Craig A. Rosen	
				Art Unit	1631	
	(Use as many she	eets as	necessary)	Examiner Name	M. K. Zeman	
Sheet	2	of	3	Attorney Docket Number	PZ020P2C1	

	AP	HILLER et al., "The WashU-Merck EST Project 1997," GenBank Accession No. AA446081,
		(06/03/1997)
,	AQ	HILLER et al., "The WashU-Merck EST Project 1997," GenBank Accession No. AA428329, (10/16/1997)
,	AR	HILLER et al., "The WashU-Merck EST Project," GenBank Accession No. W16535, (04/29/1996)
<b> </b>	AS	HILLER et al., "Generation and analysis of 280,000 human expressed sequence tags,"
l		GenBank Accession No. W40362, (08/20/1996)
	AT	HILLER et al., "The WashU-NCI human EST Project," GenBank Accession No. AA435946, (11/09/1997)
	AU	HILLER et al., "The WashU-Merck EST Project 1997," GenBank Accession No. AA436043, (05/30/1997)
,	AV	HILLER et al., "The WashU-Merck EST Project," GenBank Accession No. N79550, (03/29/1996)
,	AW	HILLER et al., "The WashU-Merck EST Project 1997," GenBank Accession No. AA479744, (08/08/1997)
,	AX	HILLER et al., "The WashU-Merck EST Project 1997," GenBank Accession No. AA429924, (10/16/1997)
,	AY	HILLER et al., "The WashU-Merck EST Project," GenBank Accession No. R73714, (06/05/1995)
,	AZ	HILLER et al., "The WashU-Merck EST Project 1997," GenBank Accession No. AA429909, (10/16/1997)
	BA	HILLER et al., "The WashU-Merck EST Project 1997," GenBank Accession No. AA477085, (08/08/1997)
	ВВ	ALGATE, Geneseq Accession No. AAH83712; "Human ovarian tumour associated polynucleotide sequence SEQ ID NO:1336, from WO01/51513 (09/25/01)
	ВС	ALGATE, Geneseq Accession No. AAS25067; "Human ovarian PCR-subtracted cDNA library clone #1248, from WO01/57207 (11/07/01)
<del>                                     </del>	BD	HILLIER, et al., Genbank Accession No. R27318 (April 24, 1995)
	BE	HILLIER, et al., Genbank Accession No. W56634 (October 15, 1996)
	BF	RIBAS, et al., "Genes encoding three new members of the leukocyte antigen 6 superfamily
	ום	and a novel member of Ig superfamily, together with encoding the regulatory nuclear chloride ion channel protein (hRNCC) and an N omega-N omega-dimethylarginine dimethylaminohydrolase homologue, are found in a 30-kb segment of the MHC class III
<del>                                     </del>	00	region," J. Immunol., 163(1):278-287 (July 1, 1999)
	BG	SAPPERSTEIN, et al., "p115 is a general vesicular transport factor related to the yeast endoplasmic reticulum to Golgi transport factor Usolp," Proc. Natl. Acad. Sci. USA, 92:522-526 (January 17, 1995)
	вн	BARROSO, et al., "Transcytosis-associated protein (TAP)/p115 is a general fusion factor required for binding vesicles to acceptor membranes," Proc. Natl. Acad. Sci. USA, 92:527-531 (January 17, 1995)
	ВІ	SOHADA, et al., "Phosphorylation of the vesicle docking protein p115 regulates its association with Golgi membrane," J. of Biol. Chem., 273(9):5385-5388 (February 27, 1998)
	BJ	ADAMS, et al., "Complementary DNA sequencing: Expressed sequence tags and human genome project," Science, 252:1651-1656 (June 21, 1991)
l	BK	RIBAS, et al., Genbank Accession No. NP_079537 (March 18, 2001)
	BL	NCI-CGAP, Genbank Accession No. Al127339 (October 27, 1998)
	BM	HILLIER, et al., Genbank Accession No. H03945 (June 20, 1995)
	BN BN	HILLIER, et al., Genbank Accession No. H03945 (June 20, 1995)  HILLIER, et al., Genbank Accession No. H03135 (June 20, 1995)
	BO	NCI-CGAP, Genbank Accession No. Al188337 (October 28, 1998)
	BP	MARRA, et al., Genbank Accession No. AA930440 (April 23, 1998)
Examiner Signature		Date Considered



PTO/SB/08a/b (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Subs	stitute for form 1449A/B/F	то		Complete if Known		
-				Application Number	10/621,401-Conf. #6102	
IN	<b>FORMATIO</b>	N DI	SCLOSURE	Filing Date	July 18, 2003	
S'	TATEMENT	BY A	APPLICANT	First Named Inventor	Craig A. Rosen	
				Art Unit	1631	
	(Use as many s	sheets as	necessary)	Examiner Name	M. K. Zeman	
Sheet	3	of	3	Attorney Docket Number	PZ020P2C1	

BQ	MARRA, et al., Genbank Accession No. AA500454 (July 1, 1997)	
BR	HILLIER, et al., Genbank Accession No. W56597 (October 15, 1996)	
BS	NCI-CGAP, Genbank Accession No. Al220729 (November 29, 1998)	
ВТ	ROWEN, et al., "Sequence of the mouse major histocompatibility locus class III region," GenBank Accession No. AAC84157 (December 10, 1998)	
BU	ROWEM, et al., "Direct submission," GenBank Accession No. 095867 (June 15, 2002)	
BV	MALLYA, et al., "Transcriptional analysis of a novel cluster of LY-6 family members in the human and mouse major histocompatibility complex: Five genes with many splice forms," GenBank Accession No. CAC85539 (June 26, 2002)	
BW	ATTWOOD, Teresa, "The Babel of bioinformatics," Science, 290:471-473 (2000)	
ВХ	GERHOLD, et al., "It's the genes! EST access to human genome content," BioEssays, 18(12):973-981 (1996)	
BY	WELLS, et al., "The chemokine information source: identification and characterization of novel chemokines using the WorldWideWeb and Expressed Sequence Tag Databases," Journal of Leukocyte Biology, 61(5):545-550 (1997)	
BZ	RUSSELL, et al., "Structural features can be uncovered in proteins with similar folds," Journal of Molecular Biology, 244:332-350 (1994)	
CA	YAMANOUCHI, et al., "A T cell activation antigen, Ly6C, induced on CD4+ Th1 cells mediates an inhibitory signal for secretion of IL-2 and proliferation in peripheral immune responses," European Journal of Immunology, 28(2):696-707 (1998)	
СВ	NISHIZAWA, et al., "Identification of a proline-binding motif regulating CD2-triggered T lymphocyte activation," Proc. Natl. Sci. USA, 95:14897-14902 (December 1998)	
СС	FREUND, et al., "The GYF domain is a novel structural fold that is involved in lymphoid signaling through proline-rich sequences," Nat Struct Biol. 6(7):656-660 (July 1999)	
CD	KUMAR, et al., "Basic Pathology, 6th Ed., W.B. Saunders Company, Chapter 16, pp. 516-555 (1997)	
CE	ROUAULT, et al., "Novel mammalian group XII secreted phospholipase A2 lacking enzymatic activity," Biochemistry, 42(39):11494-11503 (October 7, 2003)	
CF	SMITH, et al., "Identification of novel tumor markers in hepatitis C virus-associated hepatocellular carcinoma," Cancer Res., 63(4):859-864 (February 15, 2003)	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \*\* CITE NO.: Those patent(s) or publication(s) which are marked with an double asterisk (\*\*) next to the Cite No. are not supplied because they were previously cited by or submitted to the Office in a prior application relied upon in this application for an earlier filing date under 35 U.S.C. 120.

Examiner	Date	
Signature	Considered	•

<sup>&</sup>lt;sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/17 (10-03)

Approved for use through 7/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMENT

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Complete if Known

F	EE	TR	AN	SMI	TT	AL
	1	for	FY	200	4	

Effective 10/01/2003. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

Application Number	10/621,401-Conf. #6102
Filing Date	July 18, 2003
First Named Inventor	Craig A. Rosen
Examiner Name	M. K. Zeman
Art Unit	1631
Attorney Docket No.	PZ020P2C1

TOTAL AMOUNT OF PAYMENT (\$) 180.00						Attom	ey Doo	ket No	).	PZ020P2C1			
METHOD OF PAYMENT (check all that apply)						FEE CALCULATION (continued)							
Check Credit Money Other None Order						3. ADDITIONAL FEES							
Card Corder C.													
X Deposit Account:						Large Entity Small Entity							
Deposit Account 08-3425						Fee	ee Fee Fee Fee Fee Description		Fee Description				
Number						Code	(\$)	Code	(\$)			Fee Paid	
Deposit Account Human Genome Sciences, Inc.						1051	130	2051	65	Surcharg	e - late filing fee or oath	igsquare	
Name The Director is authorized to: (check all that apply)							50	2052	25	Surcharg sheet.	je – late provisional filing fee or cover		
						1053	130	1053	130		tich appoissotion	<u> </u>	
										_	tish specification		
X Charge any additional fee(s) or any underpayment of fee(s)						1812	2,520	1812	2,520	-	a request for ex parte reexamination	$\sqsubseteq$	
Charge fee(s) indicated below, except for the filling fee						1804	920*	1804	920*	Examine	ng publication of SIR prior to r action	l i	
to the above-identified deposit account.					1805	1,840*	1805	1,840*	Requesti Examine	ng publication of SIR after			
FEE CALCULATION						1251	110	2251	55		n for reply within first month		
1. BASIC						1252	420	2252	210	Extensio	n for reply within second month		
Large Entity	Small	Entity	•			1253	950	2253	475	Extensio	n for reply within third month		
Fee Fee	Fee	Fee (\$)	Fee Descr	iption	Fee Paid	1254	1,480	2254	740	Extensio	n for reply within fourth month		
1001 770	2001	385	Utility filing	fee		1255	2,010	2255	1,005	Extensio	n for reply within fifth month		
1002 340	2002	170	Design filin	g fee		1401	330	2401	165	Notice of	Appeal		
1003 530	2003	265	Plant filing	fee		1402	330	2402	165	Filing a b	orief in support of an appeal		
1004 770	2004	385	Reissue fili	ng fee		1403	290	2403	145	Request	for oral hearing	$\sqcup$	
1005 160	2005	80	Provisional	filing fee	L	1451	1,510	1451			o institute a public use proceeding	igwdown	
SUBTOTAL (1) (\$) 0.00					1452	110	2452	55		o revive unavoidable			
						1453	1,330	2453	665		o revive - unintentional		
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE  Extra Fee from						1501	1,330	2501	665	•	ue fee (or reissue)		
			Claims t	elow	Fee Paid	1502	480	2502	240	Design is			
Total Claims Independent	20	-44**	<b>===</b>		0.00	1503	640	2503	320	Plant iss			
Claims	4	-8**	- L× <u> </u>	=	0.00	1460	130	1460	130		to the Commissioner	<u> </u>	
Multiple Depe	ndent I		<u> </u>	=		1807	50	1807	50		ng fee under 37 CFR 1.17(q)		
Large Entity			-			1806	180	1806	180		ion of Information Disclosure Stmt	180.00	
Fee Fee Code (\$)	Fee Code	Fee (\$)	Fee I	Descriptio	מ	8021	40	8021	40		g each patent assignment per (times number of properties)		
1202 18	2202	9	Claims in excess	s of 20		1809	770	2809	385		submission after final rejection		
1201 86	2201	43	Independent cla	ims in exce	ess of 3	4040	***	0040	005	-	1.129(a)) additional invention to be	$\vdash$	
1203 290	2203	145	Multiple depende			1810	770	2810	385	examine	d (37CFR 1.129(b))	igsquare	
1204 86	2204	43	** Reissue indep over original p		aims	1801	770	2801	385	•	for Continued Examination (RCE) for expedited examination		
1205 18	2205	9	** Reissue claim	s in exces	s of 20	1802	900	1802	. 900		gn application		
			and over origi	nal patent		Other	fee (spe	cify)					
		SUI	BTOTAL (2) [	\$)	0.00	*Redu	iced by l	Basic Fi	ling Fee	Paid	SUBTOTAL (3) (\$)	180.00	
**or number previously paid, if greater; For Reissues, see above													

SUBMITTED BY (Complete (if applicable))									
Name (Print/Type)	Doyle A. Sie	<b>e</b> r	t	Registration No. (Attorney/Agent)	47,088	Telephone	(301) 354-3932		
Signature	X	onfe a. X	wi	1		Date	September 28, 2004		